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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/758,365	01/15/2004	Dean G. Karahalios	31132.141	5308	
46333	7590 08/11/2005		EXAM	EXAMINER	
HAYNES AND BOONE, LLP			REIMERS, ANNETTE R		
901 MAIN ST SUITE 3100			ART UNIT	PAPER NUMBER	
DALLAS, TX	75202		3732		
		•	DATE MAIL ED: 09/11/200	•	

Please find below and/or attached an Office communication concerning this application or proceeding.

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	Application No.	Applicant(s)	
	10/758,365	KARAHALIOS, DI	EAN G.
Office Action Summary	Examiner	Art Unit	
	Annette R. Reimers	3732	
The MAILING DATE of this communication a Period for Reply	ppears on the cover sheet with the	correspondence ac	idress
A SHORTENED STATUTORY PERIOD FOR REF THE MAILING DATE OF THIS COMMUNICATION  - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a r  - If NO period for reply is specified above, the maximum statutory period.  - Failure to reply within the set or extended period for reply will, by stat Any reply received by the Office later than three months after the ma earned patent term adjustment. See 37 CFR 1.704(b).	N. 1.136(a). In no event, however, may a reply be tile eply within the statutory minimum of thirty (30) day od will apply and will expire SIX (6) MONTHS from tute, cause the application to become ABANDONE	mely filed ys will be considered time the mailing date of this c ED (35 U.S.C. § 133).	
Status			
1) Responsive to communication(s) filed on	•		
	nis action is non-final.		
3) Since this application is in condition for allow closed in accordance with the practice unde	vance except for formal matters, pro		e merits is
Disposition of Claims			
4)  Claim(s) 1-24 is/are pending in the application 4a) Of the above claim(s) is/are withd 5)  Claim(s) is/are allowed. 6)  Claim(s) 1-24 is/are rejected. 7)  Claim(s) is/are objected to. 8)  Claim(s) are subject to restriction and	rawn from consideration.		
Application Papers			
9) The specification is objected to by the Exami 10) The drawing(s) filed on <u>02 February 2004</u> is to Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct of the oath or declaration is objected to by the	are: a) $\square$ accepted or b) $\square$ objectene drawing(s) be held in abeyance. Se ection is required if the drawing(s) is observed in the drawing(s) is observed.	e 37 CFR 1.85(a). ojected to. See 37 C	FR 1.121(d).
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority docume 2. Certified copies of the priority docume 3. Copies of the certified copies of the priority docume application from the International Bure * See the attached detailed Office action for a life.	ents have been received. ents have been received in Applicat riority documents have been receive eau (PCT Rule 17.2(a)).	ion No ed in this National	Stage
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/0 Paper No(s)/Mail Date 4/23/04, 07/11/05.	4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal B 6) Other:	ate	O-152)

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#### **DETAILED ACTION**

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-8 and 12-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Rabbe et al. (U.S. Patent Number 5,702,453).

Rabbe et al. discloses a vertebral implant comprising a biologic strut/tubular body,21, sized to fit between two vertebral endplates, a pair of ring-shaped, furrowed cleat assemblies, 22, each cleat comprising an outer end wall, an inner end wall, and a side wall which defines a hollow bore, wherein spikes, 91 or 120, extend from each outer end wall, and wherein each hollow bore is sized to fit over an end of the tubular body and slidably pass from the end along at least a portion of the length of the tubular body (see Figures 3 and 7). Furthermore, the vertebral implant, prior to interposition between the two vertebral endplates, is capable of the tubular body slidably passing through the hollow bores in each of the cleat assemblies and wherein the spikes on each outer end wall are directed away from each other and extend toward the opposite ends of the tubular body without extending past the opposite ends of the tubular body (see Figures 3 and 7 and column 7, lines 66-67 and column 8, lines 1-2). The vertebral implant comprises an attachment assembly for attaching the tubular body to the cleat

assemblies, comprising threaded apertures extending through the side walls of each of the cleat assemblies and a set screw, 24, attachment member extendable through the apertures into contact with the tubular body, wherein the set screws are extended through each of the threaded apertures after a distracting force varies the space between vertebral endplates to create the desired vertebral alignment (see column 8, lines 13-28). Openings, sized to permit graft material entry into the hollow bore, extend through the side walls of each of the cleat assemblies (see column 3, lines 42-45 and column 4, lines 55-57). The inner end wall of each of the cleat assemblies is provided with alignment positions for aligning and positioning the cleat assemblies and the outer end wall of the cleat assemblies is angled with respect to the inner end wall (see Figures 3, 9 and 10). Regarding claims 21-24, the method for inserting a vertebral implant between two vertebral endplates is inherently performed using the device of Rabbe et al.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rabbe et al. (U.S. Patent Number 5,702,453).

Rabbe et al. disclose the claimed invention except for the hollow bore of each cleat assembly being smooth. It would have been an obvious matter of design choice to

construct the device of Rabbe et al. having the hollow bore of each cleat assembly being smooth, since applicant has not disclosed that having the hollow bore of each cleat assembly being smooth solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with the hollow bore of each cleat assembly not being smooth.

Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rabbe et al. (U.S. Patent Number 5,702,453).

Rabbe et al. disclose the claimed invention except the hollow bore having a diameter between 13mm and 25mm and the angle between the outer end wall and the inner end wall being between 4 and 15 degrees. It would have been an obvious matter of design choice to one skilled in the art at the time the invention was made to construct the device of Rabbe et al. with the hollow bore having a diameter between 13mm and 25mm and the angle between the outer end wall and the inner end wall being between 4 and 15 degrees, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In re Aller, 105 USPQ 233.

### Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO 892 for art cited of interest.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Annette R. Reimers whose telephone number is (571) 272-7135. The examiner can normally be reached on Monday-Friday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eduardo Robert can be reached on (571) 272-4719. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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EBUARDO C. ROBERT
PRIMARY EXAMINER